

**Notice of Allowability**

Application No.

09/893,685

Applicant(s)

ASAUCHI, NOBORU

Examiner

Benjamin O. Dulaney

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7/6/07.
2. ☒ The allowed claim(s) is/are 3-11, 19-28 and 38-43.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
TWYLER LAMB

SUPERVISORY PATENT EXAMINER

## **DETAILED ACTION**

### ***Response to Arguments***

Examiner acknowledges election of Group I (claims 3-11, 19-28 and 38-43).

### ***Allowable Subject Matter***

Claim 3-11, 19-28 and 38-43 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding claim 3, the prior art does not contain a valid combination of references that teach a printing material container detachably attached to a printing apparatus having a clock signal line, a data signal line, and a reset signal line, said printing material container comprising: a reservoir unit that keeps a printing material therein; a clock terminal that receives a clock signal sent via the clock signal line of said printing apparatus; a data terminal that transmits a data signal to and from the data signal line of said printing apparatus; a reset terminal that receives a reset signal sent via the reset signal line of said printing apparatus; a storage element having a plurality of non-volatile storage areas that are sequentially accessed; and a storage element control unit that is initialized at a first level of the input reset signal and carries out a writing/reading operation of data into and from the storage element according to the data signal synchronously with the input clock signal when the reset signal is switched over to a second level, wherein the storage element stores identification information therein, and the storage element control unit comprises: a data bus that connects

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the data terminal with the storage element; an address counter that increments a count thereon synchronously with the clock signal input via the clock terminal and resets the count to an initial value in response to input of the reset signal via the reset terminal; an input-output controller that is electrically connected with both the storage element and the data bus and controls a direction of data transfer with regard to the storage element as well as a direction of data transfer with regard to the data bus; a comparator that compares printing material container identification information, which is assigned to said printing material container for identification thereof and is input via the data bus, with identification information stored in the storage element to determine coincidence or incoincidence of the two pieces of identification information; and a write/read enable unit that allows the writing/reading operation of data into and from the storage element according to the data signal in the case of coincidence of the two pieces of identification information.

Regarding claim 19, the prior art does not contain a valid combination of references that teach a plurality of printing material containers, each comprising a non-volatile storage device that is mounted thereon and connects with a control unit via a bus with a clock terminal, a data terminal, and a reset terminal, said control unit comprising a clock signal generation circuit that generates a clock signal, a reset signal generation circuit that generates a reset signal, an identification information output circuit that outputs identification information to identify a desired printing material container among said plurality of printing material containers, and a data output circuit that transmits a data array including

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the output identification information and a write/read command to a data signal line synchronously with the clock signal, each of said printing material containers comprising: a data bus that connects with the data terminal; a storage element that stores a different piece of identification information assigned to said each printing material container and has a storage area sequentially accessed; a comparator that connects with the data bus and compares the identification information output from said control unit with the identification information stored in the storage element to determine coincidence or incoincidence of the two pieces of identification information; an input-output controller that is interposed between the storage element and the data bus and controls a direction of data transfer with regard to the storage element as well as a direction of data transfer with regard to the data bus; and a command decoder that connects with the data bus and the comparator, analyzes the write/read command input via the data bus when a result of the determination by the comparator represents coincidence of the identification information output from said control unit with the identification information stored in the storage element, and requires the input-output controller to switch over the direction of data transfer with regard to the data bus based on a result of the analysis.

Claim 38 is allowed based on the same reasoning as provided above for claims 3 and 19.

Claims 4-11, 20-28 and 39-43 are allowed because they depend upon allowed claims.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

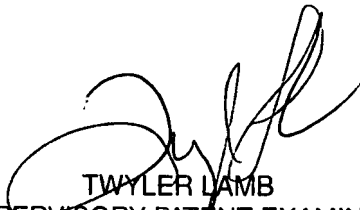
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin O. Dulaney whose telephone number is (571) 272-2874. The examiner can normally be reached on Monday - Friday (9am - 6pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Lamb can be reached on (571)272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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SUPERVISORY PATENT EXAMINER